

UNITED STATES DISTRICT COURT  
DISTRICT OF NEW HAMPSHIRE

Sig Sauer, Inc.;  
Check-Mate Industries, Inc.;  
Check-Mate International  
Products, Inc.; Nordon, Inc.;  
and Thomas Pierce d/b/a  
Pierce Design,  
Plaintiffs

v.

Case No. 14-cv-461-SM  
Opinion No. 2016 DNH 096

Freed Designs, Inc.,  
Defendant

**O R D E R**

The parties propose differing constructions of the following terms as used in the '764 patent at issue<sup>1</sup>: "shoulder" and "bottom shoulder."

The patent protects the invention of a grip extender for handguns. The grip extender attaches to, and facilitates the convenient use of, longer magazines in a handgun by providing a continuous and comfortable hand grip. Oversimplified perhaps, but it is enough, for current purposes, to say that the invention operates in the following way. A magazine slides downward into the grip extender and, as it travels, the

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<sup>1</sup> United States Patent No. 6,928,764.

magazine's floor plate compresses pliable vertical "ribs" along the inner surface of the extender until the floor plate clears those ribs, at which point the bottom of the floor plate comes to rest on a "tang," while the bottom of the "ribs" expand back over the top of the floor plate, thereby securing the magazine in the extender by means of the opposing pressure between the ribs and tang. The terms at issue are used in the following context in Claim 1:

. . . said collar having a size and shape sufficient to elastically receive and grip the magazine and magazine floor plate thereby securely retaining the collar and having at least one pair of opposed tangs oriented inward from the interior side walls of the collar; and b) further comprising at least one pair of opposed ribs, said ribs oriented inward from the interior side walls of the collar, with a bottom shoulder of said ribs distanced above the tangs, said distance approximately equal the determinable thickness of the magazine floor plate; and c) when sliding the grip extender into its final position on the magazine, a step of the said tangs engages the lower surface of the floor plate and captures the corresponding upper surface of floor plate against said the bottom shoulders of the opposed ribs. (Emphasis supplied.)

The functional description in Claim 1 seems unambiguous and is easily understood. The ribs and tangs hold the magazine flange securely between them, thereby stabilizing and securing the extender to the magazine. It is equally clear that the term "bottom shoulder" is used in direct reference to the "ribs" to describe the bottom end of the ribs that engage the upper part

of the flange. (I use "flange" as a common English word easily understood as an equivalent but less cumbersome means of expressing "a floor plate, of determinable thickness, with a lower surface and an upper surface, with said floor plate also having a peripheral surface larger than a peripheral surface of a corresponding body of the magazine.")

But what does the phrase "bottom shoulder" of the ribs mean, as it is used in the patent? Or, more correctly, what would a person of ordinary skill in the pertinent art think it means? Neither party deemed it useful to offer the opinion of a person of ordinary skill in a pertinent art, though they were given that opportunity at the claim construction hearing. Both counsel are content to rest on the papers filed.

It is well-understood that "the words of a claim are generally given their ordinary and customary meaning." Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (citations and internal punctuation omitted). "We have made clear, moreover, that the ordinary and customary meaning of a claim term is the meaning that term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Id. at 1313 (citations omitted). When construing claim terms one

relies primarily upon "intrinsic evidence," i.e., the claims, the specification, and the prosecution history, reading the terms in the context of the claim and the patent as a whole. See Sunovion Pharms., Inc. v. Teva Pharms. USA, Inc., 731 F.3d 1271, 1276 (Fed. Cir. 2013).

The words used in a claim must be given their common meanings unless the inventor used them differently. Inline Plastics Corp. v. Tenneco Packing Corp., 979 F. Supp. 79, 83 (D. Conn. 1997), Envirotech Corp. v. Al George, Inc., 730 F.2d 753, 759 (Fed. Cir. 1984). And, of course, the common meaning is the meaning a person of ordinary skill in the relevant art would give to the claim. Id.

As in Inline Plastics, the term "shoulder" or here, "bottom shoulder," as used in Claim 1 of the '764 Patent, "is consistent with the relevant, common dictionary meaning of the word 'shoulder,' that is, any projection for keeping something in place, or preventing movement past the projection." Inline Plastics, at 83 (citing Funk and Wagnall, Standard College Dictionary, (1963)). Nothing in the '764 patent, or the pleadings filed, suggests that the inventor meant to use the term "shoulder" differently. Indeed, in context, the common

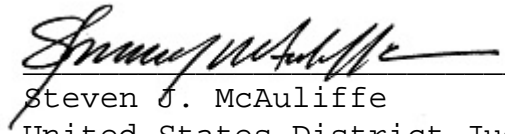
meaning is entirely consistent with the described function of the invention.

A reasonable person of ordinary skill in the field of mechanical or product design engineering related to small arms manufacturing would readily understand the term "shoulder," in the context of Claim 1, to mean that bottom surface of the described ribs that engages the upper part of the magazine flange. The described "shoulder" is plainly meant to provide an abutment between the ribs themselves and the upper part of the flange - an opposing force capturing or containing the flange, restricting its movement, particularly upwards, and securing the extender to the magazine (in combination with the tangs).

Accordingly, the meaning of "shoulder" is construed consistently with its common dictionary meaning, as described in Inline Plastics Corp. In the context of the '764 patent, then, "bottom shoulder" means that part of the described ribs, at the bottom end, projecting or contoured for capturing the upper surface of a magazine floor plate as an abutment, to prevent movement of the floor plate, particularly upwardly, while the extender is in use.

The parties' proposed definitions are deficient in a number of ways, but extensive discussion is not warranted. It should perhaps be noted, however, that plaintiffs' proposed 90-degree plane limitation is fundamentally inconsistent with the varied contour expectation inherent in the common understanding of the term "shoulder." The construct of the described rib "shoulder" would be readily understood by one skilled in the mechanical and design arts related to small arms manufacture as including varied slopes, widths, spacings, and contact points, consistently with the ordinary definition of the term. The contour of the "shoulders," therefore, can be expected to vary widely, as the term is a general descriptor of a bottom rib configuration that serves as an abutment, and "captures" and secures the upper surface of the flange on the bottom of the inserted magazine.

**SO ORDERED.**

  
Steven J. McAuliffe  
United States District Judge

June 6, 2016

cc: Laura L. Carroll, Esq.  
Zachary R. Gates, Esq.  
Neal E. Friedman, Esq.  
Michael J. Bujold, Esq.